15. The device as claimed in claim 13, wherein the second fullerene layer comprises a metal dopant selected from the group consisting of Li, Na, K and La.

16. A method for fabricating an electronic device comprising forming a junction between a first fullerene layer having a first doping concentration and a second fullerene layer having a second doping concentration different from the first doping concentration.

17. The method as claimed in claim 16, further comprising forming at least one of the first and second fullerene layers as a monolayer.

18. The method as claimed in claim 16, further comprising doping the second fullerene layer with an electron donor dopant.

19. The method as claimed in claim 16, further comprising doping the second fullerene layer with an alkali metal or lanthanum dopant.

20. The method as claimed in claim 16, further comprising forming at least one of the first and second fullerene layers from C60, C82 or a single bucky ball.

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